

4.7 Triangle Inequalities

Objective: Use triangle measurements to decide which side is longest and which angle is largest.

Theorem: If one side of a triangle is longer than another side, then the angle opposite the longer side is larger than the angle opposite the shorter side.

Theorem: If one angle of a triangle is larger than another angle, then the side opposite the larger angle is longer than side opposite the smaller angle.

Checkpoint in the middle of page 213.

Triangle Inequality Theorem: The sum of the lengths of any two sides of a triangle is greater than the length of the third side.

Checkpoint in the middle of page 214.